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10/803,492	03/18/2004	Takeshi Yoshinori	4041K-000191	5685

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HARNESSE, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

PHAM, LAM P

ART UNIT PAPER NUMBER

2636

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/803,492

Applicant(s)

YOSHINORI ET AL.

Examiner

Lam P. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 37-39 is/are rejected.
- 7) ☒ Claim(s) 36, 40, 41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/11/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 27-32, 34-35, 37-41 rejected under 35 U.S.C. 102(b) as being anticipated by **Kishi et al.** (US 5127708).

**Regards claim 1**, Kishi disclose a vehicle tiredness alleviating system provided with a seat vibration system (19, 37) for repeatedly vibrating a seat for a predetermined time, said vehicle tiredness alleviating system further provided with a means (M-1, 37) for judging the tiredness degree of a passenger seated on a seat in said passenger compartment, wherein said vehicle tiredness alleviating system performs control of vibration time of said seat vibration system based on the tiredness degree of said passenger, which is judged by said means for judging the tiredness degree as seen in figures 1-7; col. 2, lines 32-68; col. 3, lines 1-68; col. 4, lines 1-68; col. 5, lines 1-68 and col. 6, lines 1-24.

**Regards claims 2-26**, Kishi also satisfied limitations of claims 2-26 as Kishi satisfied the limitation “a seat vibration system for repeatedly vibrating a seat for a predetermined time” according to condition “at least one of a vehicle air-conditioning system for controlling a temperature in a passenger compartment, a seat heating

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system for heating the surface of a seat, and a seat vibration system for repeatedly vibrating a seat for a predetermined time” of claim 1.

**Regards claim 27,** Kishi disclose said seat vibration system has a vibration generating means for making a seat vibrate, and said means for judging the tiredness degree is provided with:

a seated person information detecting means (pressure sensor 35) for detecting seated person information (weight or pressure or movement) relating to a seated person sitting on said seat, a tiredness judging means (microcomputer 37) for judging if said seated person is tired based on said seated person information, and a vibration control means (microcomputer 37) for controlling vibration by said vibration generating means based on results of judgment by said tiredness judging means as seen in Figures 1-5; col. 3, lines 12-68; col. 4, lines 1-68; col. 5, lines 1-49.

**Regards claim 28,** Kishi disclose said vibration control means (37) causes said vibration generating means (19) to vibrate said seat when said tiredness judging means judges that said seat person is tired as seen in col. 3, lines 12-43.

**Regards claim 29,** Kishi disclose said vibration control means causes said vibration generating means to vibrate said seat for a predetermined duration when said tiredness judging means judges that said seated person is tired as seen in col. 4, lines 20-56.

**Regards claim 30,** Kishi disclose said tiredness judging means calculates a tiredness degree showing an extent of tiredness of said seated person based on said seated person information as criteria for judging if said seated person is tired, and said

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vibration control means determines said predetermined duration based on said tiredness degree as seen in col. 3, lines 12-68; col. 4, lines 1-68 and col. 5, lines 1-50.

**Regards claim 31**, Kishi disclose said vibration control means sets the strength of vibration of said seat based on said results of judgment by said tiredness judging means and controls vibration by said vibration generating means so that said seat vibrates by said strength. This limitation is also met by Kishi when one of the conditions "vibration strength or vibration time" in claim 1 is satisfied.

**Regard claim 32**, Kishi disclose said tiredness judging means calculates a tiredness degree showing an extent of tiredness of said seated person based on said seated person information as a criteria for judging if said seated person is tired, and said vibration control means determines said strength based on said tiredness degree. Kishi also meets this limitation when one of the conditions "vibration strength or vibration time" in claim 1 is satisfied.

**Regards claim 33**, Kishi disclose said vibration control means sets said strength to a first predetermined strength when said tiredness degree is a first predetermined value to less than a second predetermined value and sets said

strength to a second predetermined strength higher than said first predetermined strength when said tiredness degree is said second predetermined value or more. Kishi also meets this limitation when one of the conditions "vibration strength or vibration time" in claim 1 is satisfied.

**Regards claim 34**, Kishi disclose said vibration control means controls vibration by said vibration generating means for a predetermined duration so that said seat

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vibrates by said strength determined based on said tiredness degree when said tiredness judging means judges that said seated person is tired. Kishi also meets this limitation when one of the conditions "vibration strength or vibration time" in claim 1 is satisfied.

**Regards claim 35**, Kishi disclose said vibration control means determines said predetermined duration based on said tiredness degree. Kishi also meets this limitation when one of the conditions "vibration strength or vibration time" in claim 1 is satisfied.

**Regards claim 37**, Kishi disclose said seated person information detecting detects motion information of said seated person, as said seated person information as seen in col. 3, lines 12-25.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 38-39 rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al.

**Regards claim 38**, Kishi fail to disclose said seated person information detecting means detects a heartbeat signal from said seated person as said seated person information, and said tiredness judging means calculates said tiredness degree based on said heartbeat signal.

However, it has been known in the art to detect a heartbeat signal for use in judging a fatigue or tiredness or dozing degree or level as seen in JP2002250076.

Thus, it would have been obvious to one of ordinary skilled in the art to incorporate a heartbeat detecting means for detecting a heartbeat signal for use in judging a fatigue or tiredness degree as an alternative.

**Regards claim 39**, Kishi fail to disclose said tiredness judging means calculates a normal number of heartbeats and current number of heartbeats of said seated person from said heartbeat signal and calculates the ratio by which said current number of heartbeats falls compared with said normal number of heartbeats as said tiredness degree.

However, it has been known in the art to measure a heartrate and comparing with an average heartrate for determining a dozing or tiredness or fatigue degree based on the ratio. Thus it would have been obvious to one of ordinary skilled in the art to have the tiredness judging means calculates a normal number of heartbeats and current number of heartbeats of said seated person from said heartbeat signal and calculates the ratio by which said current number of heartbeats falls compared with said normal number of heartbeats as said tiredness degree.

#### ***Allowable Subject Matter***

5. Claims 36, 40-41 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogasawara (US 5523664) disclose a system for alleviating fatigue in a seat.

Ikeyama (US 4706072) disclose a human condition monitoring on road.

Kojima et al. (US 6014081) disclose a driving condition-monitoring apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lam P. Pham whose telephone number is 571-272-2977. The examiner can normally be reached on 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A. Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lam Pham



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September 22, 2005



JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600